

# INTERNATIONAL SEARCH REPORT

International application No.

PC1/DE 2004/001658

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07D 491/10, C07D 471/10, C07D 221/20, C07D 209/54, A61K 31/438, A61K 31/403, A61K 31/407, A61P 11/06, A61P19/02, 29/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07D, A61K, A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, CHEM ABS DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| A         | WO 9825605 A1 (MERCK & CO., INC.), 18 June 1998<br>(18.06.1998), see part., examples 30-42<br>--  | 1-19                  |
| A         | WO 0014086 A1 (LEUKOSITE, INC.), 16 March 2000<br>(16.03.2000), see part., examples 68-77<br>--   | 1-19                  |
| A         | Pujol, MD et al, "Novel tricyclic spiropiperidines. Synthesis and adrenergic activity of spiro(1,3-benzodioxolopiperidines) and spiro(1,3-benzodioxanepiperidines)", Eur J Med Chem, 1996, vol. 31, page 889 - page 894<br>-- | 1-19                  |

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

|   |  |
|---|--|
| * Special categories of cited documents:  | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  |
| "A" document defining the general state of the art which is not considered to be of particular relevance  | "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |
| "B" earlier application or patent but published on or after the international filing date   | "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family  |
| "O" document referring to an oral disclosure, use, exhibition or other means  |  |
| "P" document published prior to the international filing date but later than the priority date claimed  |  |

|  |   |
|--|---|
| Date of the actual completion of the international search<br>2 March 2005  | Date of mailing of the international search report<br>04-03-2005        |
| Name and mailing address of the ISA/<br>Swedish Patent Office<br>Box 5055, S-102 42 STOCKHOLM<br>Facsimile No. +46 8 666 02 86 | Authorized officer<br>Eva Johansson/EÖ<br>Telephone No. +46 8 782 25 00 |

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PCT/SE 2004/001658

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages    | Relevant to claim No. |
|-----------|---|-----------------------|
| A         | WO 0164213 A1 (SMITHKLINE BEECHAM CORPORATION),<br>7 Sept 2001 (07.09.2001)<br><br>-- | 1-19                  |
| A         | WO 9831364 A1 (MERCK & CO., INC.), 23 July 1998<br>(23.07.1998)<br><br>--             | 1-19                  |
| A         | EP 0004951 A1 (HOECHST AKTIENGESELLSCHAFT),<br>31 October 1979 (31.10.1979)<br><br>-- | 1-19                  |
| P,X       | WO 2004005295 A1 (ASTRAZENECA AB), 15 January 2004<br>(15.01.2004)<br><br>--<br>----- | 1-19                  |

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 18-19  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 18-19 relate to a method of treatment of the human or animal body by surgery or by therapy, as well as diagnostic  
.../...
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Box II.1

methods /Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds.

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

30/01/2005

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|    |         |    |            | CA | 2271146 A | 14/05/1998 |
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|    |         |    |            | GB | 9703005 D | 00/00/0000 |
|    |         |    |            | NZ | 335885 A  | 26/01/2001 |
|    |         |    |            | US | 6387232 B | 14/05/2002 |
|    |         |    |            | US | 5962462 A | 05/10/1999 |

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| WO | 0014086 | A1 | 16/03/2000 | AU | 2464999 A     | 27/03/2000 |
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|    |         |    |            | EP | 1109804 A     | 27/06/2001 |
|    |         |    |            | JP | 2002524458 T  | 06/08/2002 |
|    |         |    |            | US | 6288083 B     | 11/09/2001 |
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|    |         |    |            | US | 6503926 B     | 07/01/2003 |
|    |         |    |            | US | 20020161005 A | 31/10/2002 |

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|    |         |    |            | EP | 1003743 A    | 31/05/2000 |
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|    |         |    |            | JP | 2001508798 T | 03/07/2001 |
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| EP | 0004951 | A1 | 31/10/1979 | CA | 1132988 A  | 05/10/1982 |
|    |         |    |            | CA | 1132989 A  | 05/10/1982 |
|    |         |    |            | DE | 2961804 D  | 00/00/0000 |
|    |         |    |            | ES | 479368 A   | 16/07/1979 |
|    |         |    |            | JP | 54145660 A | 14/11/1979 |
|    |         |    |            | US | 4166120 A  | 28/08/1979 |

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|    |            |    |            | CA | 2462819 A     | 30/05/2003 |
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|    |            |    |            | SE | 0202133 D     | 00/00/0000 |
|    |            |    |            | US | 20050003361 A | 06/01/2005 |